

***LAMINATOPINA ORIENTALIS* GEN. ET SP. NOV.
(HEMIPTERA: FULGOROIDEA: DELPHACIDAE)
FROM CHINA¹**

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ABSTRACT: A new genus and species, *Laminatopina orientalis*, gen. et sp. n. from China is described and illustrated, and assigned to the tribe Delphacini within the subfamily Delphacinae (Delphacidae). The new genus resembles *Neometopina* Yang, 1989, but can best be distinguished from the latter by features of the male genitalia.

KEY WORDS: Hemiptera, Auchenorrhyncha, Fulgoromorpha, Delphacini, *Laminatopina* gen. n., China.

According to Asche (1985, 1990), the subfamily Delphacinae is divided into three tribes: Tropidocephalini, Saccharosydmini and Delphacini. The Delphacini represents the largest tribe within the subfamily, and also the largest group of Delphacidae worldwide. Although the Chinese Delphacini has been studied extensively, and includes 129 genera (see Ding, 2006), there are probably many more new taxa awaiting to be found. In the present paper one new genus and one new species of Delphacini from China are described. The type specimens of the new species for this study are deposited in the Entomological Museum, Northwest A & F University, Yangling, Shaanxi, China (NWAUFU). The methods and terminology in this paper follow those of Ding (2006).

***Laminatopina* NEW GENUS**

Type species. *Laminatopina orientalis* n.sp.

Diagnosis. Head: Longer and narrower than pronotum. Vertex longer medially than broad at base, acutely rounding into frons, Y-shaped carina with stem weak. Median carina of frons forked at base. Antennal segment II longer than I. Thorax: Lateral carinae of pronotum not attaining hind margin. Legs with tibia normal, calcar of hind leg tectiform with many black-tipped teeth on posterior margin. Abdomen: Male anal segment ring-like, caudoventral margin produced medially into a large spinose process. Pygofer with a distinct plate-like process at each side of dorsal margin of diaphragm, twisted, without medioventral process. Phallus tubular, strongly decurved medially, one strong process arising basally. Diaphragm broad, dorsomedially with a projection. Suspensorium with dorsal part Y-shaped, ventral part ring-like. Genital styles extremely long, strongly diverging from base.

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Remarks. Of the Chinese genera of Delphacini, the plate-like structures of the diaphragm are highly unusual and only found in *Neometopina* and the new genus. The new genus is also related to *Neometopina* in many parallel features: head narrower than pronotum; vertex longer medially than broad at base; fastigium acutely rounded; frons with median carina forked at base; antennal segment II longer than I; spinal formula of hind leg 5-7-4; pronotum with lateral carinae not attaining hind margin; calcar of hind leg with many teeth; forewing acutely rounded at apex; male anal segment ring-like and caudoventral margin produced medially into a large spinose process; pygofer without medioventral process; diaphragm broad and dorsal margin produced; suspensorium with ventral part ring-like; genital styles long and narrowed subapically. But can be distinguished from the latter by: vertex with basal compartment wider at base than greatest length; the stem of Y-shaped carina weak; rostrum reaching to metacoxae; especially by the features of the male genitalia: male anal segment with median process not produced in ventral margins; diaphragm distinctly projected dorsomedially; suspensorium with the dorsal portion Y-shaped; phallus tubular, decurved, and with one strong process arising basally; genital styles strongly diverging.

Etymology. The name is derived from the Latin word “laminatus” (plate), and with combination of the feminine suffix “-a”, which refers that the pygofer with a distinct plate-like process at each side of dorsal margin of the diaphragm. The gender is feminine.

Laminatopina orientalis, NEW SPECIES

(Figures 1-15)

Type Locality. CHINA, Hainan, Bawangling.

Description. Color. Body entirely pale yellowish orange. Vertex with outer area to submedian carinae black, frons sublaterally with narrow stripe, blackish brown, genae yellowish orange. Median carina of pro- and mesonotum whitish yellow, inner lateral carinae with light yellowish brown stripe. Ocelli dark. Eyes dark brown to black. Dorsum of abdomen yellowish orange.

Structure: Body length ♂ 4.54 mm, ♀ 4.67-4.73 mm. Head including eyes narrower than pronotum (0.84:1), longer medially than broad at base about 1.3:1, lateral margins of vertex in dorsal view subparallel, except where expanded laterally behind eyes, submedian carinae originating from near middle of lateral carinae, not uniting at apex, basal compartment wider at base than greatest length. Fastigium acutely rounded. Vertex length ♂ 0.26-0.27 mm, ♀ 0.32-0.35 mm, width ♂ 0.24 mm, ♀ 0.25-0.29 mm. Frons about 2.4 times as high as its maximum width, widest at apex, lateral carinae slightly sinuate, frons width ♂ 0.24 mm, ♀ 0.26-0.27 mm, length ♂ 0.62 mm, ♀ 0.68-0.69 mm. Antennae terete, surpassing frontoclypeal suture, length of segment (♂) I 0.15-0.19 mm, II 0.30-0.32 mm, (♀) 0.16-0.19 mm, II 0.31-0.32 mm. Rostrum reaching to metacoxae. Postclypeus large, as wide as frons at apex. Lateral carinae of pronotum pos-

terolaterally directed, slightly curved, pronotum width ♂ 0.74-0.78 mm, ♀ 0.81-0.86 mm, length ♂ 0.22-0.24 mm, ♀ 0.24-0.27 mm. Mesonotal carina obscure at apical third, lateral carinae diverging, reaching to posterior margin or not, mesonotum length ♂ 0.65-0.70 mm, ♀ 0.74-0.82 mm. Forewing long and narrow, roundly acute at apex, length ♂ 3.86 mm, ♀ 3.93-4.02 mm. Metabasisarsus slightly longer than tarsomere 2+3 combined, spinulation of metabasisarsus 7 (2+5), 2nd 4, calcar length ♂ 0.38 mm, ♀ 0.39-0.45 mm, tectiform, concave ventrally, more than half length of basisarsus, with 20-22 black-tipped teeth.

Male genitalia: Anal segment large, median spinose process nearly straight, apex bifurcated. Pygofer in profile subtriangular, distinctly wider ventrally than dorsally, in posterior view with opening longer than wide. Phallus tubular and with many small ventral teeth, apex enlarged, membranous, basal process shorter than phallus, broad at basal half, then gradually tapering to acute apex. Suspensorium well-developed and sclerotized. Diaphragm broad, dorsomedially with a cone-shaped projection, pigmented and sclerotized. Opening for genital styles large, dorsal margin nearly straight, produced into a small lobe medially, ventral margin evenly curved. Genital styles extremely long and strongly diverging from base, surpassing level of lateral margins of pygofer, sinuate, slightly widened subapically and greatly narrowed subapically to acute apex.

Brachypterous. Unknown.

Recorded Hosts. None.

Material Examined. Holotype. Macropterous ♂. China: Hainan Province, Bawangling, 28-V-1983, coll. Yalin Zhang. Paratypes: 1♂, 3♀, same data as holotype.

Etymology. The name is derived from Latin word "orientalis" which refers to the type locality which is in Oriental Region.



Figures 1-15. *Laminatopina orientalis*, sp. n. male. Fig. 1. Head and thorax, dorsal view. Fig. 2. Face. Fig. 3. Head and pronotum, lateral view. Fig. 4. Forewing. Fig. 5. Male terminalia, posterior view. Fig. 6. Same, left lateral view. Fig. 7. Pygofer, posterior view, anal segment and genital styles removed. Fig. 8. Same, left lateral view. Fig. 9. Phallus, dorsolateral view, right aspect. Fig. 10. Same, dorsolateral view, left aspect. Fig. 11. Same, left lateral view. Fig. 12. Genital styles, left side. Fig. 13. Suspensorium. Fig. 14. Anal segment, ventral view. Fig. 15. Same, left lateral view.

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